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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/917,264	07/27/2001	Colin P. Britton	0103488-00003	7813
21125	7590	04/19/2004	EXAMINER	
NUTTER MCCLENNEN & FISH LLP WORLD TRADE CENTER WEST 155 SEAPORT BOULEVARD BOSTON, MA 02210-2604			ABEL JALIL, NEVEEN	
		ART UNIT		PAPER NUMBER
		2175		19
DATE MAILED: 04/19/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/917,264	BRITTON ET AL.
	Examiner	Art Unit
	Neveen Abel-Jalil	2175

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 09 February 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 27-30,34-41,43,44 and 53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 27-30,34-41,43,44 and 53 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

1. The amendment filed on 9 February 2004 has been received and entered. Claims 1-26, 31-33, 42, and 45-52 have been cancelled. Therefore, Claims 27-30, 34-41, 43-44, and 53 are now pending.

Claim Objections

2. Dependent claims 34, 38, 41 are objected to because of the following informalities:
Claims 34, 38, and 41 need to be rewritten to include the missing elements of the claims they incorporate. For example, claim 34 should be rewritten to include the elements of claims 28 and 27 as stated in the claim. Claim 38 should be rewritten to include the elements of claims 37 and 36. Claim 41 should be rewritten to include the elements of claims 40 and 39. Appropriate correction is required.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 36-38 are rejected under 35 U.S.C. 101 because the claims are directed to a non-statutory subject matter, specifically, directed towards an data structure.

The language of the claim raises a question as to whether the claim is directed merely to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101.the disclosed invention is inoperative and

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therefore lacks utility. In claim 36, there is merely the abstract idea of "periodically removing redundancies in RDF triplets" that is not supported by any means.

Claims 37-38 depended from claim rejected claim 36, and therefore contain the same deficiency as above.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 36-38 are recites the limitation " the RDF triplets " in claim 36. There is insufficient antecedent basis for this limitation in the claim.

7. Claims 36-38 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. In claim 36, the recitation of: periodically removing redundancies in the RDF tripes.

It is unclear to the Examiner how the step was arrived at considering the pre-amble use of the word "comprising" in an Independent claim which indicates by default the existence of more than one step in the claim language.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 36-38, and 53 are rejected under 35 U.S.C. 102(e) as being anticipated by Lipkin et al. (U.S. Pub. No. 2002/0049788 A1).

As to claim 36, Lipkin et al. discloses a digital processing method for enterprise application integration comprising:

periodically removing redundancies in the RDF triplets (See page 71, column 1, lines 27-67, and page 71, column 2, lines 1-25).

As to claim 37, Lipkin et al. discloses wherein the step of reducing redundancies includes combining related triplets into bags (See page 19, column 2, lines 14-22, wherein “bags” reads on “container”, also see page 66, column 1, lines 10-21).

As to claim 38, Lipkin et al. discloses wherein the step of reducing redundancies includes determining a confidence level that two or more triplets represent redundant information (See page 71, column 1, lines 27-67, and page 71, column 2, lines 1-25).

As to claim 53, Lipkin et al. discloses a digital processing method for enterprise application integration comprising:

removing redundancies in the RDF triples by executing the steps of:

i) comparing sequential levels of objects of the RDF triples (See page 9, column 2, lines 43-67, wherein the table shows the hierarchical ordering of the URI),

ii) determining a confidence level that two or more triplets represent redundant information (See page 71, column 1, lines 27-67, and page 71, column 2, lines 1-25).

iii) merging into a bag triples determined to be redundant on a basis of that confidence level (See page 19, column 2, lines 14-22, wherein "bags" reads on "container", also see page 66, column 1, lines 10-21).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 27-30, 34, 39-41, and 43-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lipkin et al. (U.S. Pub. No. 2002/0049788 A1) in view of Bradford (U.S. Patent No. 6,678,679 B1).

As to claim 27, Lipkin et al. discloses a digital data processing method for enterprise application integration comprising:

displaying on a browser a markup language documents that (See page 4, paragraphs 0073-0078, and see page 31, paragraphs 0560-0566)

(i) generates one or more queries for application to the data store (See page 73, column 2, lines 1-25, wherein “markup language documents” reads on “XML”, and wherein “database” reads on “information server”),

(ii) presents, via the browser, content generated from the data store in response to the one or more queries (See page 2, column 1, lines 49-61),

where the markup language document identifies user interface components to display said content (See page 31, paragraphs 0560-0578).

Lipkin et al. does not teach storing, in a data store, RDF triplets representing transactional information received from each of a plurality of databases.

Bradford teaches storing, in a data store, RDF triplets representing transactional information received from each of a plurality of databases (See column 15, lines 17-67, and see column 16, lines 1-12).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have modified Lipkin et al. to include storing, in a data store, RDF triplets representing transactional information received from each of a plurality of databases.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have modified Lipkin et al. by the teaching of Bradford to include storing, in a data store, RDF triplets representing transactional information received from each of a plurality of databases because having a variety of search retrieval methods to access data from disparity of databases reduces business costs by keeping all data separate and secure and only having access to needed information.

As to claim 28, Lipkin et al. as modified discloses wherein at least one of the databases stores additional data in a form other than as RDF triplets (See page 71, column 1, lines 6-16).

As to claim 29, Lipkin et al. as modified discloses wherein the markup language document identifies the queries to be generated in response to one or more user selections and/or responses to user-input controls specified by that document (See Bradford column 12, lines 16-43).

As to claim 30, Lipkin et al. as modified discloses wherein the markup language document identifies one or more menus, button bars or other controls that allow the user to specify a search or otherwise modify the content presented via the browser (See Bradford column 12, lines 47-67, also see Bradford column 13, lines 13-56).

As to claim 34, Lipkin et al. as modified discloses wherein the steps of receiving and transmitting information using the first protocol includes receiving and transmitting an RDF triplet representing any of marketing information or an e-commerce or other transaction (See page 3, column 2, lines 60-67, and page 4, column 1, lines 1-5, also see page 58, column 2, lines 1-14).

As to claim 39, Lipkin et al. discloses a digital data processing method for enterprise application integration comprising

storing, in a data store, RDF triplets representing transactional information received from each of a plurality of databases (See page 69 column 2, lines 54-67, and see page 70, column 1, lines 24-35, also see page 14, column 1, lines 32-41, also see page 21, column 1, lines 43-48), displaying on a browser a markup language document that (See page 4, paragraphs 0073-0078, and see page 31, paragraphs 0560-0566)

(ii) presents, via the browser, content generated from the data store in response to the one or more queries (See page 2, column 1, lines 49-61),

where the markup language document identifies user interface components to display said content (See page 31, paragraphs 0560-0578),

generating a directed graph from the RDF triplets (See page 63, column 1, lines 64-67, and page 63, column 2, lines 1-9),

Lipkin et al. does not teach (i) generates one or more queries for application to the data store in response to one or more user selections and/or responses to user-input controls specified by that document.

Bradford teaches (i) generates one or more queries for application to the data store in response to one ore more user selections and/or responses to user-input controls specified by that document (See column 12, lines 47-67, also see column 13, lines 13-56).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have modified Lipkin et al. to include (i) generates one or more queries for application to the data store in response to one ore more user selections and/or responses to user-input controls specified by that document.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have modified Lipkin et al. by the teaching of Bradford to include (i) generates one or more queries for application to the data store in response to one or more user selections and/or responses to user-input controls specified by that document because having a variety of search retrieval methods to access data from disparity of databases reduces business costs by keeping all data separate and secure and only having access to needed information.

As to claim 40, Lipkin et al. discloses comprising the step of generating the directed graph in response to a said query (See page 63, column 1, lines 64-67, and page 63, column 2, lines 1-9).

As to claim 41, Lipkin et al. as modified discloses wherein the steps of receiving and transmitting information using the first protocol includes receiving and transmitting an RDF triplet representing any of marketing information or an e-commerce or other transaction (See page 3, column 2, lines 60-67, and page 4, column 1, lines 1-5, also see page 58, column 2, lines 1-14).

12. Claims 35, and 43-44 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lipkin et al. (U.S. Pub. No. 2002/0049788 A1) in view of Bradford (U.S. Patent No. 6,678,679 B1) as applied to claims 27-34 above, and further in view of Delcambre et al. (U.S. Pub. No. 2002/0059566 A1).

As to claim 35, Lipkin et al. as modified discloses comprising:

applying the query to one or more of the plurality of databases using respective applications program interfaces (“API”) (See Lipkin et al. page 73, column 1, lines 50-67, and Lipkin et al. page 73, column 2, lines 1-12, also see Lipkin et al. page 74, column 1, lines 32-43), retrieving information from the one or more databases in response to the applied query (See Lipkin et al. page 73, column 2, lines 1-25, wherein “retrieving information” reads on “XML”, and wherein “database” reads on “information server”),

Lipkin et al. as modified still does not teach storing in the data store a query for application to at least one of the databases, converting that retrieved information into said RDF triplets.

Delcambre et al. teaches storing in the data store a query for application to at least one of the databases, converting that retrieved information into said RDF triplets (See pages 6-7, paragraph 0067, also see page 5, paragraphs 0053-0054, and see pages 1-2, paragraphs 0012).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have further modified Lipkin et al. as modified to include storing in the data store a query for application to at least one of the databases, converting that retrieved information into said RDF triplets.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have further modified Lipkin et al. as modified by the teaching of Delcambre et al. to include storing in the data store a query for application to at least one of the databases, converting that retrieved information into said RDF triplets because converting to RDF format is

well used in the Internet content field allowing for standardized efficient descriptive language of data storage and retrieval.

As to claim 43, Lipkin et al. discloses a digital processing method for enterprise application integration comprising:

displaying on a browser a markup language document that (See page 4, paragraphs 0073-0078, and see page 31, paragraphs 0560-0566)

(ii) presents, via the browser, content generated from the data store in response to the one or more queries (See page 2, column 1, lines 49-61),

where the markup language document identifies user interface components to display said content (See page 31, paragraphs 0560-0578),

applying the query to one or more of the plurality of databases using respective applications program interfaces (“API”) (See page 73, column 1, lines 50-67, and page 73, column 2, lines 1-12, also see page 74, column 1, lines 32-43),

retrieving information from the one or more databases in response to the applied query (See page 73, column 2, lines 1-25, wherein “retrieving information” reads on “XML”, and wherein “database” reads on “information server”),

responding to an applied query by generating a directed graph from the RDF triplets (See page 63, column 1, lines 64-67, and page 63, column 2, lines 1-9),

parsing the directed graph and presenting content generated therefrom via the browser (See page 63, column 1, lines 64-67, and page 63, column 2, lines 1-9, also see page 37, column 1, lines 14-15).

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Lipkin et al. does not teach (i) generates one or more queries for application to the data store in response to one ore more user selections and/or responses to user-input controls specified by that document,

storing in the data store one or more further queries for application to at least one of the databases.

Bradford teaches (i) generates one or more queries for application to the data store in response to one ore more user selections and/or responses to user-input controls specified by that document (See column 12, lines 47-67, also see column 13, lines 13-56),

storing in the data store one or more further queries for application to at least one of the databases (See column 12, lines 16-43).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have modified Lipkin et al. to include (i) generates one or more queries for application to the data store in response to one ore more user selections and/or responses to user-input controls specified by that document, storing in the data store one or more further queries for application to at least one of the databases.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have modified Lipkin et al. by the teaching of Bradford to include (i) generates one or more queries for application to the data store in response to one ore more user selections and/or responses to user-input controls specified by that document, storing in the data store one or more further queries for application to at least one of the databases because having a variety of search retrieval methods to access data from disparity of databases reduces business costs by keeping all data separate and secure and only having access to needed information.

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Lipkin et al. as modified still does not teach converting that retrieved information into said RDF triplets.

Delcambre et al. teaches converting that retrieved information into said RDF triplets (See pages 6-7, paragraph 0067, also see page 5, paragraphs 0053-0054, and see pages 1-2, paragraphs 0012).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have further modified Lipkin et al. as modified to include converting that retrieved information into said RDF triplets.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have further modified Lipkin et al. as modified by the teaching of Delcambre et al. to include converting that retrieved information into said RDF triplets because converting to RDF format is well used in the Internet content field allowing for standardized efficient descriptive language of data storage and retrieval.

As to claim 44, Lipkin et al. as modified discloses wherein the parsing step includes parsing the directed graph and presenting therefrom consolidated information plural ones of the databases (See page 63, column 1, lines 64-67, and page 63, column 2, lines 1-47).

Response to Arguments

13. Applicant's arguments with respect to claims 27-30, 34-41, 43-44, and 53 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neveen Abel-Jalil whose telephone number is 703-305-8114. The examiner can normally be reached on 8:00AM-4: 30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici can be reached on 703-305-3830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Neveen Abel-Jalil
April 15, 2004

Charles Rones
CHARLES RONES
PRIMARY EXAMINER

CHARLES RONES
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